

BLUE BOOK
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RECENT PROGRESS OF THE FORESTRY MOVEMENT.

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THE BEGINNINGS and early progress of an organized movement for a study of present forestry conditions in Illinois, with carefully drawn plans for their improvement and development, have been described in reports on the activities of the State Natural History Survey published in the Illinois Blue Books for 1921-1922 (p. 313) and for 1923-1924 (p. 385).

Since the last of these articles was prepared, notable progress has been made, the principal features of which are:

(1) The completion of a systematic survey of Illinois forests; (2) an elaborate study of the economics of forestry in Illinois, the product of which has been published as a bulletin of the Natural History Survey; (3) the passage by the Fifty-third General Assembly of an act establishing at the University of Illinois a forestry division "at such time and to such extent as funds are definitely appropriated to the University for forestry investigational purposes;" and (4) the passage by the Fifty-fourth General Assembly of a comprehensive act in relation to State forests.

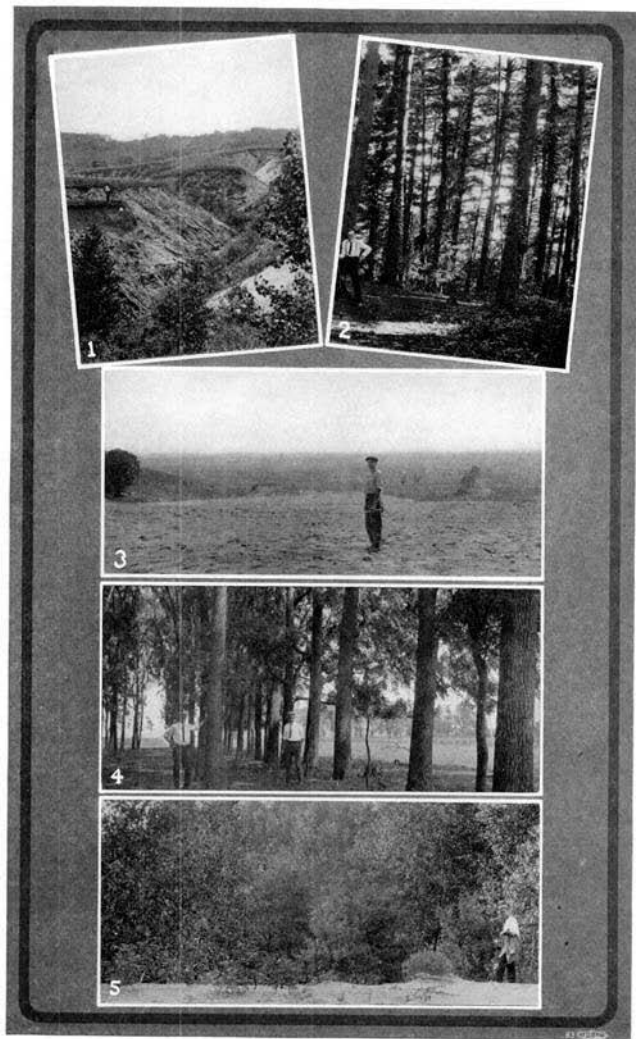
THE FOREST SURVEY.

The field work of the forest survey, begun in 1921 as a project of the Natural History Survey, has completely covered 68 counties and the essential parts of 10 more, leaving 24 counties of northeastern Illinois unsurveyed because their wooded areas are now and have always been too sparse and scanty to make a detailed survey worth while; but in order to get the materials for a fair estimate of the percentage of woodland in this northeastern area, surveys have been made of sample strips two miles in width and a total length of 168 miles. Growth studies of many species of trees have also been made in different soils and situations in all parts of the State as an essential part of the survey program. The main product of the field work has been crystalized in maps drawn to a scale of one mile to the inch, showing each woodland area down to a size of 5 acres, and complete acreage data have been obtained by the use of a plantimeter on these maps.

A comprehensive final report on the subject, covering the whole State, treating of its woodlands as related to different types of Illinois soils, and discussing the more important kinds of trees with reference to soils and conditions most favorable to their profitable growth, will soon be sent to the press; and a companion report on the forest trees of the State, in the form of a critical list with full notes on the several species, their distribution, requirements, and relations to nature generally, is also virtually ready for the printer.

THE ECONOMICS OF FORESTRY IN ILLINOIS.

As the data of the forest survey accumulated it first became possible to make an intelligent study of the values of the woodlands of the State, of the economics of forest management and production in Illinois, and of the relation of the local supply of forest products, present and prospective, actual and possible, to the demands of Illinois industries—matters fundamental to an adequate forestry policy, either for the State or for the owner of forest property or of lands especially adapted to forest culture. Work on this sub-



FORESTRY IN ILLINOIS.

1. Eroded field formerly in trees, Carroll County. 2. Native White Pine in Ogle County. 3. Bare sand dune suitable for growing cottonwood. 4. Black Walnut plantation over 50 years old, Mason County. 5. Cottonwood plantation on sand dune in Whiteside County.

ject, supervised for two years, and participated in personally, by the professor of forest management in the Yale University School of Forestry, culminated in an elaborate report of 127 pages, published in 1924 as a bulletin of the Natural History Survey. It deals with the total consumption and production of wood in Illinois, the uses of wood in manufacturing industries, by railroads, in mining, on Illinois farms, and the sources of its supply; with the forests of the State as they were originally and as they are now; with forests as a crop on different soils; with the effect of forest fires and measures for their prevention; and with the grazing of farm woodlands, the report concluding with a proposed forestry policy for Illinois.

It is shown by this report that there are about five million acres in Illinois which are or should be in forests, an area fairly capable of producing 435 million cubic feet of wood per annum, but the present annual production in Illinois is only 116 million cubic feet, and this is rapidly diminishing. It is further shown that over 90 per cent of the present woodlands of the State are in the form of farm woodlots, but that these are, as a rule, producing only about 50 per cent of what they might produce if wisely managed.

The first essential of a public policy is a program of farm extension work in forestry, the teaching of farm forestry at the State University, and the establishment of experimental areas in forestry in different parts of the State and on different classes of soil. Other essentials urged are a definite effort to put an end for all time to forest fires, and the establishment of State forests for a demonstration of the most profitable methods of management and as sources of supply to industry.

Besides the woodlots in the hands of farmers there are some two million additional acres of waste and eroded lands better adapted to the growth of trees than to any other use which farmers also own.

Hence the care, management, and utilization of forests in Illinois and the promotion of forest culture are essentially agricultural enterprises, calling for a kind of service which the Natural History Survey is not now organized or equipped to render.

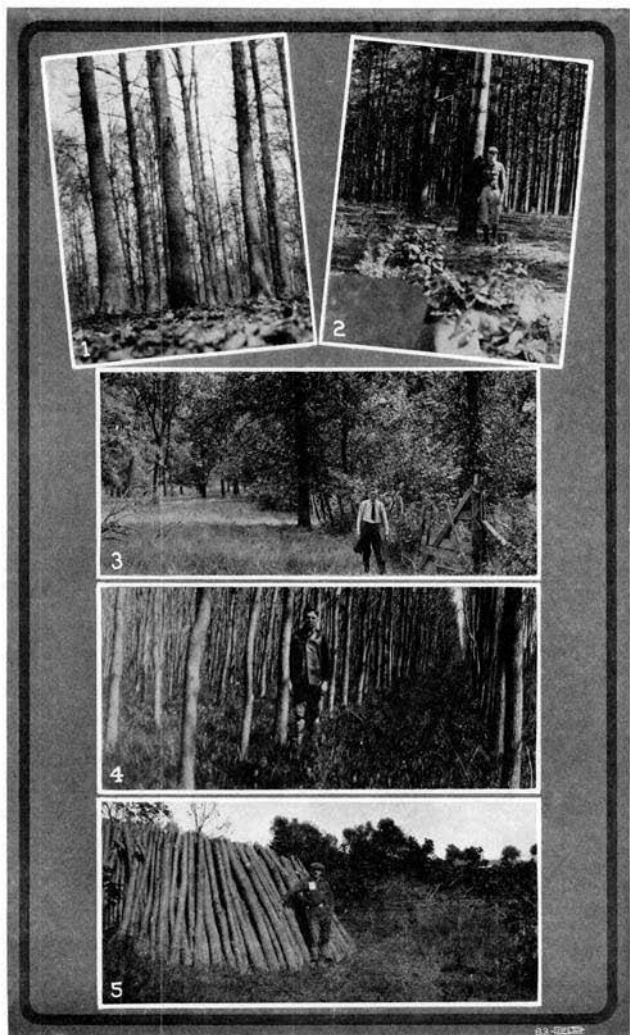
FIRST FORESTRY ACT.

In view of these facts a bill was introduced in the Fifty-third General Assembly, and passed by a virtually unanimous vote of both houses, for the establishment of a forestry division in the Agricultural Experiment Station of the University of Illinois, to be charged with "investigations in forestry and allied subjects for the promotion and development of the forestry interests of the State, with special reference to the maintenance and improvement of existing forests and farm woodlots and to the establishment of forest culture on lands better adapted to forestry than to any other use," and also with "the instruction of the people of the State, by lecture and bulletin and by the establishment of demonstration forests, in the best methods of planting, care, and utilization of forests and farm woodlots."

The operation of this act was conditioned, however, upon the passage of definite appropriations to the University for forestry investigational purposes, and as no such appropriations have yet been made, the law is a dead letter for the time being. With the expectation that such appropriations will eventually be made, the Natural History Survey is meanwhile undertaking, with a reduced forestry force, not only to complete reports of its own operations but to prepare and publish a manual on the planting, management, and most profitable uses of the farm woodlot, and is engaging also in publicity and extension work for the instruction and encouragement of the farmers of the State in the proper care and best use of their woodlots and in the utilization of waste lands for forest culture.

PROVISION FOR STATE FORESTS.

The Illinois forestry movement has thus far been limited to the acquisition and dissemination of knowledge concerning the forests and forestry interests of the State and the formulation of public and private policies concerning them; but by the recent passage of an "act in relation to forests" introduced and actively promoted in the last two sessions of the legislature by the Hon. Lewis B. Springer of Wilmette, a first step has been taken towards a general utilization of the information acquired and a practical realization of policies formulated.



FORESTRY IN ILLINOIS.

1. Fully-stocked growth of Pin Oak in Hamilton County. 2. White Pine plantation in Grundy County, 59 years old. 3. Pastured and unpastured woodland. 4. Fifteen year old plantation of Catalpa, northeast of Nashville. 5. Catalpa posts from 13-year-old stand in Adams County.

By this act the newly created Conservation Department is empowered to acquire or lease lands "more valuable for the growing of forests than for other purposes," to organize them as State forests and to hold and manage them as sources of supply of forest products for the use of the people and industries of the State, to protect them against fire and other injuries and make them accessible to the general public, to designate portions of them as game and fish sanctuaries, to set aside portions of exceptional beauty or historic interest as public parks, to sell the products of the State forests and to establish nurseries for the growing of forest trees to be planted in them; the act carries an appropriation of \$100,000 for a beginning on this highly important program.

With the passage of this bill and its approval by the Governor, and the passage also of the bill for a forestry division at the University of Illinois, requiring only a very moderate appropriation to make it operative, the State has finally declared its intention to do its part in meeting the emergency conditions which have arisen in consequence of a rapid decrease in the forestry resources of the country.